Index of Claims

| Application No.   | Applicant(s)   |
|-------------------|----------------|
| 10/021,216        | YAMADA, MINORU |
| Examiner          | Art Unit       |
| A. Dexter Tugbang | 3729           |

| 1 | Rejected |  |
|---|----------|--|
| = | Allowed  |  |

|   | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| ÷ | Restricted                     |

| N | Non-Elected  |
|---|--------------|
| ı | Interference |

| Α | Appeal   |
|---|----------|
| o | Objected |

| Claim   |       |          |          |   |   |   |                 |   | ٦      |   |  |      |       |          |        |               |                  |          |      |      |   |          |   |       |          |  |           |  |   | _ |   |          |          |   |
|---|-------|----------|----------|---|---|---|-----------------|---|--------|---|--|------|-------|----------|--------|---------------|------------------|----------|------|------|---|----------|---|-------|----------|--|-----------|--|---|---|---|----------|----------|---|
| 1     +     -     551     101     102     102     102     103     104     103     104     103     104     105     6     53     104     104     105     6     6     6     6     105     6     6     106     106     106     106     107     8     8     56     6     107     8     108     9     109     109     100     111     111     111     111     111     111     111     111     111     111     <   | Cla   | aim      | <u> </u> | _ | _ | ! | Date Claim Date |   |        |   |  |      |       |          |        |               |                  | <u> </u> | aim_ | Date |   |          |   |       |          |  |           |  |   |   |   |          |          |   |
| 102   | Final | Original | 9/7/04   |   |   |   |                 |   |        |   |  |      | Final | Original |        |               |                  |          |      |      |   |          |   | Final | Original |  |           |  |   |   |   |          |          |   |
| 3   |       | 1        | +        |   |   |   |                 |   |        | Т |  |      |       | 51       |        |               |                  | Т        |      |      |   |          |   |       | 101      |  |           |  |   |   |   | П        |          |   |
| 3   | -     | 2        | +        |   |   |   |                 |   | $\top$ |   |  | 1    |       |          | П      |               | $\top$           | Т        |      |      |   |          |   |       |          |  |           |  |   | Г |   | П        | $\Box$   |   |
| 4   |       | 3        | +        |   | Г |   |                 | Г |        |   |  |      |       | 53       | П      |               |                  |          | Г    |      |   |          |   |       | 103      |  |           |  |   |   | Г | П        |          | П |
| 6 •   |       |          | +        |   |   |   | T               | Γ | 1      |   |  |      |       |          | П      |               | 1                | Π        | Г    |      |   |          |   |       |          |  |           |  |   |   |   | П        | П        | Π |
| 6 •   |       | 5        | +        |   | T |   |                 |   | T      |   |  |      |       | 55       |        |               |                  |          | Г    |      |   |          |   |       |          |  |           |  |   |   |   | П        | П        |   |
| 107   |       |          | +        |   | Г |   |                 |   | Τ      |   |  |      |       |          |        |               |                  | Τ        |      |      |   |          |   |       |          |  |           |  |   |   |   | П        | П        | Г |
| 9     10     10     10     110     110     110     110     110     110     111     112     66     60     1110     1111     112     112     112     112     112     112     112     112     113     114     115     115     116     117     118     114     115     116     117     116     117     116     116     117     117     118     116     116     117     117     118     116     117     117     118     118     119     120     117     118     119     120     117     117     121     122     123     123     123     124     124     124     125     126     126     127     127     127     127     128     128  |       | 7        | +        |   |   |   |                 |   | Τ      |   |  | ].   |       |          | П      | T             | 1                | Π        |      |      |   |          |   |       |          |  |           |  |   |   |   | П        |          | Γ |
| 9     10     10     10     110     110     110     110     110     110     111     112     66     60     1110     1111     112     112     112     112     112     112     112     112     113     114     115     115     116     117     118     114     115     116     117     116     117     116     116     117     117     118     116     116     117     117     118     116     117     117     118     118     119     120     117     118     119     120     117     117     121     122     123     123     123     124     124     124     125     126     126     127     127     127     127     128     128  |       | 8        |          |   |   |   |                 | Т | 1      |   |  |      |       | 58       | П      |               |                  | П        |      |      |   |          |   |       | 108      |  |           |  |   |   |   |          |          | Γ |
| 11  |       | 9        | Г        |   | Г | Τ | Γ               | Т | Ī      |   |  |      |       | 59       | П      |               |                  | Τ        |      |      |   |          |   |       |          |  |           |  |   |   |   | $\Box$   | $\Box$   |   |
| 12  |       | 10       | Г        | Г | Γ | T | Π               | T | T      | Т |  | 1    |       | 60       | П      |               | $\top$           | Π        |      |      |   |          |   |       | 110      |  |           |  |   |   |   | $\sqcap$ | $\Box$   | Γ |
| 13  |       | 11       | П        |   | Г |   |                 | П | Т      |   |  | 1    |       | 61       | П      |               |                  |          |      |      | П |          |   |       | 111      |  |           |  |   |   |   | $\sqcap$ | $\neg$   |   |
| 13  |       |          |          |   |   |   | П               | Γ |        |   |  | ]    |       |          |        |               | T                |          |      |      |   |          |   |       | 112      |  |           |  |   |   |   |          |          |   |
| 15  |       |          |          |   |   |   |                 |   |        |   |  |      |       |          |        |               | T                |          |      |      |   |          |   |       | 113      |  |           |  |   |   |   | П        |          | Ī |
| 15           65           115           116     116           116           117           118           66           117           117           117           118                 118                 118                 118                 118                 118                 118                 118                 118                 118                 118                 118                 118                 118           118                 118           118           118           118           118           118           118           118           118           118           118           118           120           120           120           120           120           120 <t< td=""><td></td><td>14</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>] .</td><td></td><td>64</td><td>П</td><td></td><td>7</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>П</td><td></td><td>Γ</td></t<> |       | 14       |          |   |   |   |                 |   |        |   |  | ] .  |       | 64       | П      |               | 7                |          |      |      |   |          |   |       |          |  |           |  |   |   |   | П        |          | Γ |
| 17  |       | 15       |          |   |   |   |                 |   |        |   |  | ] .  |       | 65       |        |               |                  |          |      |      |   |          |   |       | 115      |  |           |  |   |   |   | П        |          |   |
| 18   19   68   118   119   120   120   120   120   120   121   121   122   121   122   122   122   122   122   122   122   122   122   122   123   123   124   124   124   125   125   125   125   125   125   125   125   125   126   127   128   127   128   129   129   129   129   129   129   129   129   129   130   131   131   131   131   132   133   133   133   133   133   133   133   133   133   133   133   134   134   134   134   134   134   135   136   136   137   137   138   138   136   137   137   138   138   138   138   138   138   138   138   139   140   141   141   141   141   142   143   144   144   144   144   144   144<   |       |          |          |   |   |   |                 |   | П      |   |  | ]    |       | 66       |        |               |                  |          |      |      |   |          |   |       |          |  |           |  |   |   |   | П        |          | Π |
| 19  |       |          |          |   |   |   |                 |   |        |   |  | ]    |       |          | П      | l             |                  |          |      |      |   |          | - |       |          |  |           |  |   |   |   | П        |          | Γ |
| 120   |       |          |          |   |   |   |                 |   |        |   |  | 1    |       | 68       | П      |               |                  |          |      |      | П |          |   |       |          |  |           |  |   |   |   | П        | П        | Γ |
| 21     22     121     122     123     124     123     124     123     124     123     124     125     125     125     126     126     126     126     126     127     127     127     127     127     127     127     127     127     128     129     129     130     130     130     130     130     130     130     130     130     131     131     131     132     133     134     134     135     135     136     136     137     137     137     138     139     139     139     139     149     144     144     144     144     144     144     144   |       | 19       |          |   | П |   |                 |   |        |   |  | 1    |       | 69       |        |               | $\top$           |          |      |      |   |          |   |       | 119      |  |           |  |   |   |   | П        |          |   |
| 22     3     122     123     123     124     124     124     124     124     125     125     125     125     126     125     126     125     126     127     127     127     128     129     128     129     129     130     130     130     130     131     131     131     131     132     132     132     132     133     133     133     133     133     134     135     135     136     136     136     136     136     136     137     138     138     138     138     138     138     139     139     140     140     140  |       |          | Г        |   |   | Г | П               |   | Г      |   |  | 1    |       | 70       | П      |               |                  |          |      |      |   |          |   |       | 120      |  |           |  |   |   |   | $\Box$   |          |   |
| 23     123     123     123     124     124     125     125     125     126     126     126     126     126     126     127     127     128     128     128     128     129     129     129     130     130     130     130     130     130     130     131     131     131     131     131     131     131     131     132     133     133     133     133     133     134     134     134     134     134     134     134     134     134     135     135     135     135     135     135     135     136     136     137     137     137     137     138     138     138     138     138     138     138     139     140     141     140     141     140     141     141     142     142     142     142     142     143     144     144     144     144     144     144     144     144     144  |       | 21       |          |   |   | П | П               | Π |        | Π |  | 1    |       |          |        |               | $\top$           |          |      |      |   |          |   |       | 121      |  |           |  |   |   |   | $\Box$   |          |   |
| 24   124   124   124   125   125   126   126   126   126   127   127   127   127   127   127   128   129   129   129   129   129   129   130   130   131   131   131   131   131   131   131   131   132   132   132   132   133   13   |       | 22       | Γ        |   |   |   |                 | Π |        |   |  | 1    |       | 72       |        |               | Ī                |          |      |      |   |          |   |       | 122      |  |           |  |   |   |   | $\Box$   | $\neg$   |   |
| 24     124     124     125     125     125     126     126     126     126     126     126     126     126     126     127     127     127     128     129     129     129     129     130     130     130     130     130     130     130     131     131     131     131     131     132     132     132     132     133     133     133     133     133     134     134     134     134     134     134     134     135     136     136     136     136     137     137     137     137     137     138     138     138     138     138     138     138     138     138     139     140     141     142     142     142     142     143     144     144     144     144     144     144     144     144     144     144     145     145     146     147     148     149     149     149     149  |       |          |          |   |   | П |                 | Г |        |   |  | 1    |       | 73       |        |               | $\top$           |          |      |      |   |          |   |       | 123      |  |           |  |   |   |   | $\sqcap$ |          | Π |
| 26     76     126     127     127     128     127     128     127     128     128     129     129     129     129     130     130     131     131     131     132     132     132     133     133     133     133     133     133     133     134     134     134     135     136     136     136     136     137     138     138     138     138     139     140     140     141     141     142     143     144     144     144     143     144     143     144     144     145     145     146     147     148     148     149   |       | 24       |          | Г |   |   | Π               | Π |        | Π |  | ]-   |       | 74       |        |               |                  |          |      |      |   |          |   |       | 124      |  |           |  |   |   |   | П        | П        | Γ |
| 26   77   126   127   127   127   128   127   128   128   128   129   129   129   130   130   131   131   131   132   132   132   133   133   133   133   133   133   133   133   133   133   133   134   134   134   135   135   136   135   136   137   138   138   138   138   139   139   140   141   141   142   143   144   144   144   144   144   144   144   144   145   146   147   148   148   149   |       | 25       |          |   | Π | Г |                 |   | П      |   |  | ļ.,, |       | 75       |        |               | $\top$           |          |      |      |   |          |   |       | 125      |  |           |  |   |   |   | П        | $\neg$   |   |
| 27   127   128   128   128   128   129   129   129   129   130   130   130   130   130   131   131   131   132   132   132   132   133   13   |       |          |          |   |   |   |                 |   |        |   |  | 1.   |       |          |        |               | 1                | Ì        |      |      |   | $\Box$   | 1 |       | 126      |  |           |  |   |   |   | $\Box$   | $\neg$   |   |
| 29   79   129     30   80   130     31   81   131     32   82   132     33   83   133     34   84   134     35   85   135     36   86   136     37   88   136     39   88   138     39   90   140     41   91   141     42   92   142     43   93   143     44   94   144     45   96   144     47   98   146     49   99   149   |       | 27       |          |   |   |   |                 |   |        |   |  | 1    |       | 77       |        |               | $\neg \vdash$    |          |      |      |   |          | 4 |       | 127      |  |           |  |   |   |   | $\sqcap$ |          |   |
| 30 80   31 81   32 82   33 84   35 85   36 86   37 88   39 88   40 90   41 91   42 92   43 93   44 94   45 96   46 96   47 97   48 98   49 99   148 99   148 148   49 99  |       |          |          |   |   |   |                 |   |        |   |  | 1    |       |          |        |               |                  |          |      |      |   |          |   |       | 128      |  |           |  |   |   |   | $\sqcap$ |          | Γ |
| 31   81   131   132   132   132   133   133   133   133   133   134   134   134   134   135   135   135   135   136   137   137   137   137   137   137   137   137   137   137   138   138   138   138   138   139   140   140   140   140   141   141   141   142   142   142   143   144   144   144   144   144   144   144   144   145   145   146   147   147   148   148   149   |       | 29       |          |   |   |   |                 |   |        |   |  | ŀ    |       |          |        |               | $\sqcap$         |          |      |      |   |          |   |       | 129      |  |           |  |   |   |   | $\sqcap$ |          | Π |
| 31 81   32 83   33 84   35 85   36 86   37 87   38 88   39 88   40 90   41 91   42 92   43 94   44 94   45 96   46 96   47 97   48 98   49 99   |       | 30       |          |   |   |   |                 |   |        |   |  | 1.   |       | 80       |        |               |                  |          |      |      |   |          |   |       | 130      |  |           |  |   |   |   |          | $\neg$   |   |
| 33       83   |       |          | Г        |   |   |   |                 |   |        |   |  | 1    |       | 81       |        |               | 7                |          |      |      |   | $\neg$   |   |       |          |  |           |  |   |   |   |          | $\Box$   |   |
| 34   35   36   35   36   36   37   38   37   38   39   38   39 <td< td=""><td></td><td>32</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Г</td><td></td><td>1</td><td></td><td>82</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td><math>\Box</math></td><td></td><td>Π</td></td<>  |       | 32       |          |   |   |   |                 |   |        | Г |  | 1    |       | 82       |        |               |                  |          |      |      |   |          | 6 |       |          |  |           |  |   |   |   | $\Box$   |          | Π |
| 35   85     36   86     37   87     38   88     39   89     40   90     41   91     42   92     43   93     44   94     45   95     46   96     47   97     48   99     49   149  |       | 33       | Г        |   |   |   |                 |   | T      |   |  | 1    |       | 83       |        |               | 1                |          |      |      |   |          |   |       |          |  |           |  |   |   |   | $\Box$   | $\neg$   |   |
| 35   85     36   136     37   87     38   137     39   88     40   90     41   91     42   92     43   93     44   94     45   95     46   96     47   97     48   98     49   149  |       | 34       |          |   |   |   |                 |   | Π      |   |  | 1    |       | 84       |        |               |                  |          |      |      |   | $\neg$   |   |       | 134      |  |           |  |   |   |   | $\Box$   |          |   |
| 37   87   137     38   88   138     39   90   140     41   91   141     42   92   142     43   93   143     44   94   144     45   95   145     46   96   146     47   97   147     48   99   148     49   99   149   |       | 35       |          |   |   |   |                 |   | Π      |   |  | 1    |       | 85       |        |               | 1                |          |      |      |   | $\neg$   |   |       | 135      |  |           |  |   |   |   | $\sqcap$ | $\Box$   |   |
| 37   38   39   40   41   42   43   44   45   46   47   48   49  |       | 36       | Г        |   |   | Π | Г               | Г |        |   |  | 1    |       | 86       |        |               | $\neg$           |          |      |      |   |          | , |       |          |  |           |  |   |   |   | $\Box$   | $\neg$   |   |
| 38   138     39   88     40   90     41   91     42   92     43   93     44   94     45   95     46   96     47   97     48   98     49   149   |       |          |          |   | Г | Г | Г               |   | Т      |   |  | 1 -  |       | 87       |        |               | $\top$           |          |      |      |   |          |   |       |          |  |           |  |   |   |   | $\Box$   | $\neg$   |   |
| 40   90   140     41   91   141     42   92   142     43   93   143     44   94   144     45   95   145     46   96   146     47   97   147     48   98   148     49   99   149   |       | 38       |          |   |   | П | Г               | Π |        |   |  | 1    |       | 88       |        |               | $\top$           |          |      |      |   |          |   |       |          |  |           |  |   |   |   |          |          |   |
| 40   90   140     41   91   141     42   92   142     43   93   143     44   94   144     45   95   145     46   96   146     47   97   147     48   98   148     49   99   149   |       | 39       |          |   |   |   |                 |   |        |   |  | ]    |       |          |        |               | 1                |          |      |      |   |          |   |       | 139      |  |           |  |   |   |   |          |          |   |
| 41 91   42 92   43 93   44 94   45 95   46 96   47 97   48 98   49 141   142 142   143 144   144 144   145 145   146 147   147 147   148 148   149 149  |       | 40       |          |   |   |   |                 |   |        |   |  | ]    |       | 90       |        |               |                  |          |      |      |   |          |   |       | 140      |  |           |  |   |   |   |          |          | Π |
| 42 92   43 93   44 94   45 95   46 96   47 97   48 98   49 142   143 144   144 144   145 145   146 147   147 147   148 148   149 149  |       | 41       |          |   |   |   |                 |   |        |   |  | ]    |       | 91       |        |               | $\mathbf{I}^{-}$ |          |      |      |   |          |   |       | 141      |  |           |  |   |   |   |          | $\neg$   | Π |
| 43   93   143     44   94   144     45   95   145     46   96   146     47   97   147     48   98   148     49   99   149   |       | 42       |          |   |   |   |                 |   |        |   |  | ]: , |       |          |        |               | $\mathbf{I}^{-}$ |          |      |      |   | ╗        |   |       | 142      |  |           |  |   |   |   |          | $\neg$   | _ |
| 44 94   45 95   46 96   47 97   48 98   49 144   49 145   146 147   147 148   148 149   |       |          |          |   |   |   |                 |   |        |   |  | ] i  |       |          |        |               | $I^-$            |          |      |      |   |          |   |       | 143      |  |           |  |   |   |   |          | $\neg$   |   |
| 45 95   46 145   47 96   48 97   48 98   49 148   49 149  |       | 44       |          |   |   |   |                 |   |        |   |  | ]    |       | 94       |        |               | T                |          |      |      |   |          |   |       | 144      |  |           |  |   |   |   |          | $\neg$   | _ |
| 46 96   47 97   48 98   49 148  |       | 45       |          |   |   |   |                 |   | Г      |   |  | ]    |       | 95       |        | o             |                  |          |      |      |   | $\neg$   |   |       |          |  |           |  |   |   | П | $\Box$   | $\neg$   | П |
| 47 97   48 98   49 147   49 148   49 149  |       | 46       |          |   |   |   |                 | Г |        | П |  | 1    |       |          |        |               |                  |          |      |      |   | $\neg$   |   |       | 146      |  | $\Box$    |  | П |   | П | $\sqcap$ | $\dashv$ | Г |
| 48 98 148 149 99 149 149 149 1  |       |          |          |   |   |   |                 |   |        | П |  |      |       |          | $\Box$ | $\neg \vdash$ | $\top$           | Γ        |      |      |   | $\neg$   |   |       |          |  | $\Box$    |  | П | П | П | $\sqcap$ | $\neg$   | _ |
| 49 99 149 149   |       | 48       |          |   |   |   |                 | Π |        |   |  |      |       | 98       |        | $\neg$        | 7                |          | П    |      |   | $\dashv$ |   |       |          |  |           |  |   |   |   |          | $\neg$   |   |
|   |       | 49       |          |   |   |   |                 | Γ |        | П |  |      |       | 99       | П      | $\neg \vdash$ | $\top$           | Π        | П    |      |   | ヿ        |   |       | 149      |  | $\neg$    |  |   |   | П |          | $\dashv$ | _ |
|   |       | 50       |          |   |   |   |                 |   |        |   |  |      |       |          |        |               |                  | Г        |      |      |   | $\neg$   |   |       | 150      |  | $\exists$ |  |   |   |   | $\sqcap$ | ᅥ        | _ |